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791-250 (KR). KIM, Heung-Rak [KR/KR]; 103-902 Hanshin Apt., 557 Hwangsung-dong, Kyungjoo, Kyungsang-book-do 780-130 (KR).

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(74) Agent: **C & S PATENT AND LAW OFFICE**; C-2306 Daelim Acrotel, 467-6 Dogok-dong, Kangnam-gu, Seoul 135-971 (KR).

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(71) Applicant (for all designated States except US): **RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE & TECHNOLOGY** [KR/KR]; San 32, Hyoja-dong, Nam-ku, Pohang, Kyungsangbook-do 790-330 (KR).

(72) Inventors; and
(75) Inventors/Applicants (for US only): **JUNG, Woo-Chul** [KR/KR]; 110-204 Daelim Apt., Younil-eup, Nam-ku, Pohang, Kyungsangbook-do 790-885 (KR). **KIM, Kwang-II** [KR/KR]; 1-302 Seungri Apt., Jigok-dong, Nam-ku, Pohang, Kyungsangbook-do 790-390 (KR). **KIM, Young-Deog** [KR/KR]; 207-1304 Joogong Apt., Changpo-dong, Book-ku, Pohang, Kyungsangbook-do

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(54) Title: APPARATUS AND METHODS FOR TREATING BALLAST WATER BY USING ELECTROLYSIS OF NATURAL SEAWATER

(57) Abstract: An Electrolysis-type apparatus for treating ballast water using NaOCl and a method thereof is provided. The apparatus includes: a ballast tank; an electrolyzer; a first circulation pump; a second circulation pump; and a controller. The ballast tank is installed in a ship to store seawater. The electrolyzer is connected with the ballast tank and electrolyzes the seawater. The circulation pumps are installed to allow the ballast water to flow into the electrolyzer and to discharge the electrolyzed water containing NaOCl to the ballast tank. The controller supplies power to the electrolyzer so as to control a NaOCl density and controls the circulation pumps. The apparatus and the method safely treat the seawater. Thus, environment pollution and ecosystem destruction can be minimized.